küschall®
designed for life

User manual

küschall® Champion

english

Table of contents

1 General 3

1.1 Introduction 3
1.2 Warning and instruction signs 3
1.3 Description of wheelchair 3
1.4 Use as per specifications 3
1.5 Before using the wheelchair 3

2 Using the wheelchair 4

2.1 Sitting down / getting up 4
2.2 Driving and steering the wheelchair 4
2.3 Driving over stairs and steps 5
2.4 Driving on ramps and slopes 7
2.5 Stability and balance when sitting in the chair 8
2.6 Drum brake 9
2.7 Parking brakes 10

3 Transporting the wheelchair 12

3.1 Folding and unfolding the wheelchair 12
3.2 Removing and installing the rear wheels 13

4 Adjustments and options 14

4.1 14
4.2 Adjusting the parking brakes 14
4.3 Adjusting the tension of the backrest cover 14
4.4 Height adjustable push handles 15
4.5 Armrest 15
4.6 Fixing strap 16
4.7 Transit wheels 16
4.8 Antitipper 17
4.9 Tipper aid 18
4.10 Cane holder 18
4.11 Security belt 19
4.12 Passive lighting 19
4.13 Air pump 19

5 Service 20

5.1 Cleaning 20
5.2 Maintenance 20
5.3 Service life and disposal 22
5.4 Detecting and repairing defects 23
5.5 Technical data 24
5.6 Warranty conditions 25

6 Adjustments carried out by the authorized dealer 26

6.1 Adjusting the footrest 26
6.2 Positioning the rear wheel 27
6.3 Aligning the front wheel 29
6.4 Adjusting the backrest 29
6.5 Adjusting the height of the armrest 30
6.6 Moving the clothing guard to another position 31
6.7 Moving the tire cover to another position 31

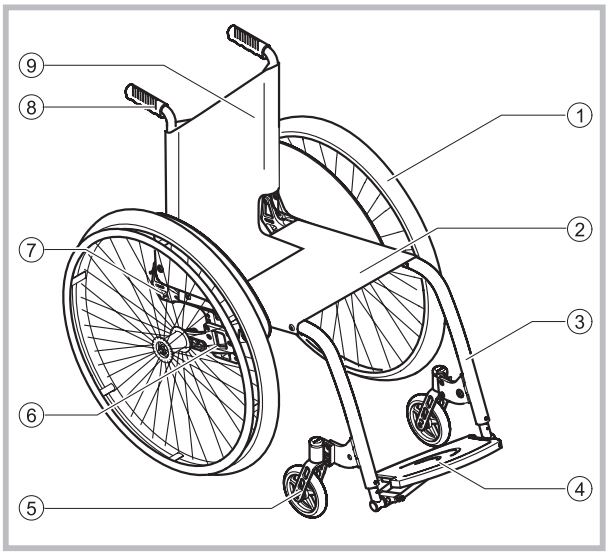

Figure 1

① Rear wheel
② Seat
③ Front frame
④ Footplate
⑤ Front wheel
⑥ Adapter plate
⑦ Lateral support
⑧ Push handles
⑨ Backrest

CE

1 General

1.1 Introduction

Thank you for purchasing a *küschall*® wheelchair.

With the *küschall*® Champion you have purchased a top-quality product. In order to make optimum use of its functionalities and learn about its safety requirements, please read these operating instructions carefully and follow the safety instructions.

1.2 Warning and instruction signs

The following signs and abbreviations are used in these operating instructions:

Warning sign containing important information to prevent injuries and material damage.

Useful information for user

Required tool: Hexagon socket wrench 3mm

Required tool: Wrench 8mm

Required tool: Screw driver

Some drawings in this manual are allegorized. Your wheelchair model may differ from the pictured one.

1.3 Description of wheelchair

The wheelchair consists of a frame (lateral support ⑦ and front frame ③) to which the seat ② and the backrest ⑨ are fixed. A folding mechanism connects the left and right lateral supports and allows folding of the wheelchair. The two rear wheels ① are connected to the lateral support via an adapter plate ⑥. The front wheels ⑤ and the footrest ④ are fixed to the front frame. (See Figure 1)

1.4 Use as per specifications

The wheelchair is driven manually and is used for independent or guided locomotion of gait-impaired persons (e.g. hemiplegia, paraplegia, tetraplegia, multiple sclerosis, traumatic brain injury, etc.). The wheelchair may only be used without a guide by persons who are physically competent to handle the wheelchair (eg. driving, steering and braking). The wheelchair is designed for in- and outdoor use on level ground and paved terrain.

1.5 Before using the wheelchair

Before using the wheelchair for the first time, please read Chapter 2 - *Using the wheelchair* carefully and follow the safety instructions.

For security reasons it is essential that you check the functionality of your wheelchair daily. Pay special attention on the following parts: Wheels, backrest, antitipper, pushhandles, quick release fork. Normally, your authorized dealer will unpack and unfold the wheelchair if necessary for you. If you receive your wheelchair unfolded, please read Chapter 3.1 - *Folding and unfolding the wheelchair*.

2 Using the wheelchair

Always adjust the clothes you wear and your driving behaviour to the conditions (weather, road conditions, individual skills etc.).

Please note that the risk of sliding is higher if the ground is wet, on gravel roads and on rough ground.

2.1 Sitting down / getting up

When getting in or out of the wheelchair, do not stand on the footrests. Danger of tipping!

You should only get on/off the wheelchair if you are physically competant. Please consult your physician or therapist.

Do not sit on the clothing guard, the tire cover or the armrest when getting on/off the wheelchair. They might bend or break. Danger of injury!

The method you use to transfer in and out of your wheelchair will depend on your own capabilities. Generally, the procedure is as follows:

- Pull the parking brake
- Hold on to the wheelchair and, if necessary, to a stable object nearby.

2.2 Driving and steering the wheelchair

Finding the tipping point

The tipping point of the wheelchair depends on the adjustment of the seat position. The correct seat position is adjusted depending on parameters such as the weight of the user, the type of handicap and the driver's driving skills. The seat position which is adjusted upon delivery corresponds to the information indicated in your order.

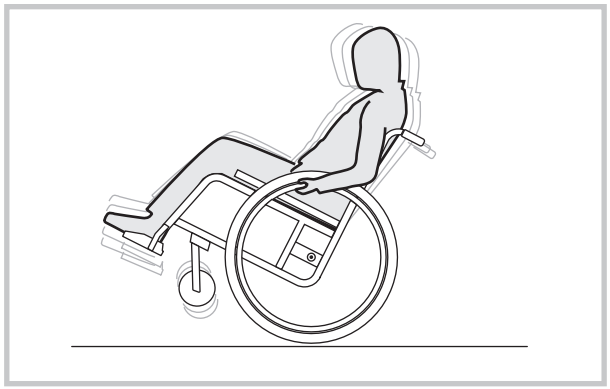

Figure 2

To find the tipping point of your wheelchair, proceed as follows (see Figure 2):

When determining the tipping point, an aide must always stand directly behind the wheelchair in order to catch it in case it tips.

To ensure that you are in control of your wheelchair at any given point, you should not exceed a speed of 7km/h. (4Mph)

- Loosen the brakes
- Sitting in the wheelchair, move forwards briefly, hold both hand rims tightly and pull back with a slight swing.
- By shifting your weight slightly and applying a counter-force to the hand rims, the tipping point can be determined.

To avoid the wheelchair tipping backward, we recommend that the wheelchair should be equipped with an antitipper (see Chapter 4).

Please note that a heavy backpack fixed to the backrest can affect the tipping behaviour of the wheelchair.

2.3 Driving over stairs and steps

Always be very careful and move slowly when driving over curbstones, stairs or other steps.

Do not try to drive over steps which have a height of more than 25 cm.

Only drive on stairs with more than one step if an aide is behind the wheelchair.

With an aide

Figure 3

Driving down a step

- Drive to the edge of the step, make sure that the wheelchair is in a straight position.
- Hold on to the two push handles, on the rear of the wheelchair, put one foot to the bottom part of the frame and tilt the wheelchair backward so that the front wheels leave the ground.
- Hold the wheelchair in this position and push it down the step slowly. The wheelchair driver can support you by using the hand rims.

- Tilt the wheelchair forward until the front wheels have ground contact again.

Driving up a step

- Move the wheelchair backward until the rear wheels hit the edge of the step.
- Pull back both push handles, tilt the wheelchair until the front wheels leave the ground and pull the rear wheels over the edge.
- Move the wheelchair until you can safely tilt the wheelchair forward.

Without an aide

If you want to drive down a step without a guide, you must have perfect control over your wheelchair and must be able to balance it on the rear wheels. (see Finding the Tipping Point in Chapter2.2).

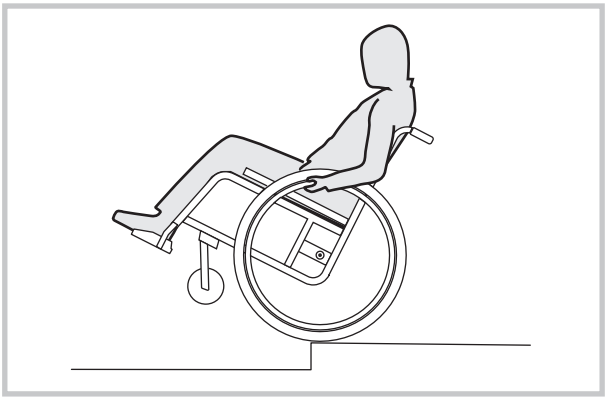

Figure 4

Driving down a step

- Drive to the edge of the step, make sure that the wheelchair is in a straight position.
- Lift up the front wheels from the floor by shifting your body weight and keep your balance.
- Now let the two rear wheels roll down over the edge. Make sure to hold the hand rims tightly.
- Tilt forward the wheelchair until the front wheels have ground contact again.

Driving up a step

- Drive the wheelchair backward until the rear wheels hit the edge of the step.

- Lift up the front wheels from the floor by shifting your body weight and keep your balance.
- Now let the two rear wheels roll up over the edge. Make sure to hold the hand rims tight.
- Move the wheelchair until you can tilt the wheelchair forward safely.
- Lower the front wheels again.

2.4 Driving on ramps and slopes

Only drive on long slopes if a guide is behind the wheelchair.

Do not drive on steep or lateral slopes (max. assending grade 7°). Danger of tipping!

Avoid abrupt changes of direction when driving on slopes. Danger of tipping!

Never pull the parking brakes when the wheelchair is in motion. Danger of tipping!

Driving uphill

To drive uphill you must set the wheelchair in motion and maintain the motion in order to be able to control the direction.

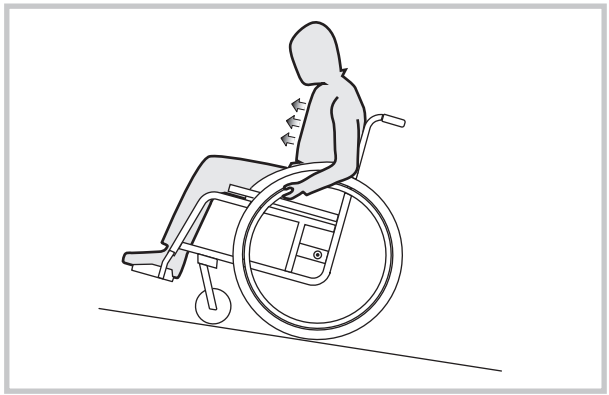

Figure 5

- Lean forward and drive the wheelchair by pushing the hand rims quickly and powerfully.

Downhill

When driving downhill direction and, above all, speed must be controlled.

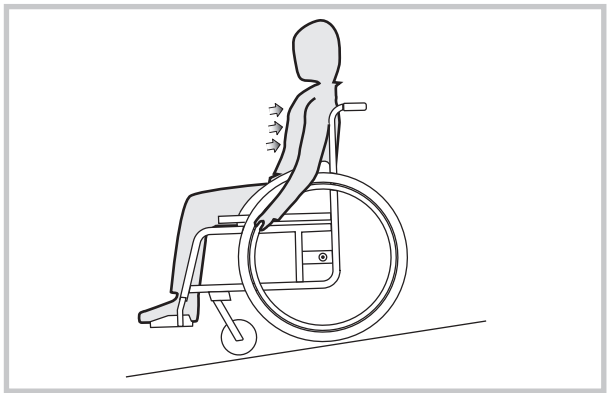

Figure 6

- Lean back and let the hand rims slip through your hands carefully. You should be able to stop the wheelchair at any time by holding the hand rims.

Please note that, the hand rims can heat if you brake for longer periods of time by hand. This applies especially to MaxGrepp and Supergripp handrims

2.5 Stability and balance when sitting in the chair

For many every day life activities you will have to bend out of the wheelchair, forwards, to the side or backwards. This has a great influence on the stability of the wheelchair. In order to keep your balance at any time, please observe the following:

Leaning forward

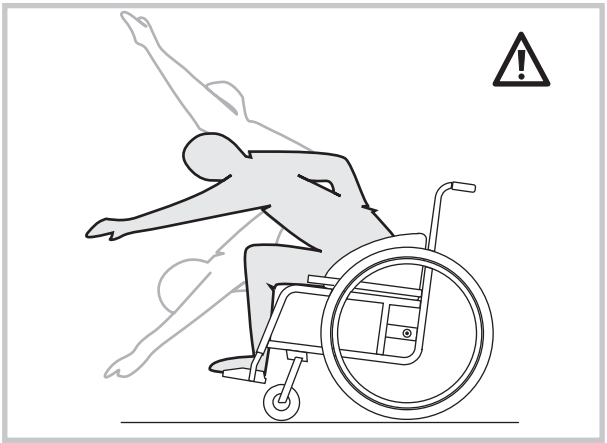

Figure 7

- Align the front wheels to the front. (To do this, move the wheelchair slightly forward and then back again.)
- Apply both parking brakes.
- When leaning forward, make sure that your abdomen remains above the front wheels.

Do not lean forward too much. You might fall out of the wheelchair!

Do not slide forward in your seat to reach out for remote objects. You might fall out of the wheelchair!

Do not try to bend your abdomen forward between your legs in order to pick up something from the floor.

Leaning backward

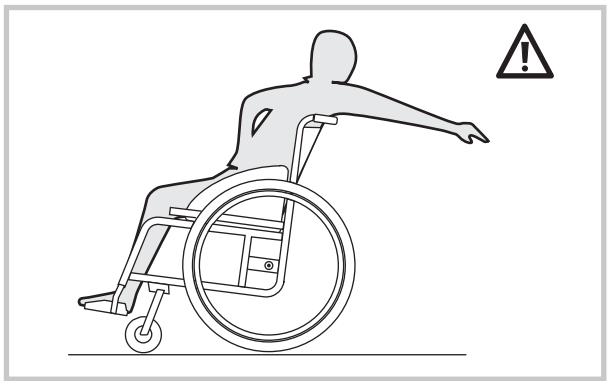

Figure 8

- Align the front wheels to the front. (To do this, move the wheelchair forward a bit and then back again.)
- Do not apply the parking brakes.
- Reach out backward only as much as possible without leaving your sitting position.

Do not lean over the backrest. You might tip backward.

2.6 Drum brake

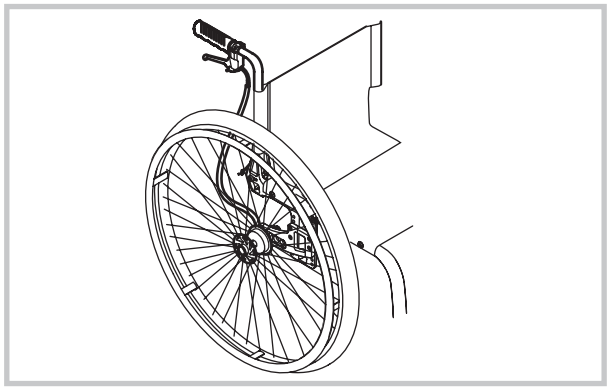

Figure 9

If your wheelchair is equipped with a drum brake, a guide can decelerate the wheelchair. The drum brake can also be used as a parking brake.

Braking

- Pull back the braking lever at the push-handle.

Locking the brake

- Pull the braking lever firmly until the securing lever engages
- Release the braking lever. Now, the brake is locked.

Releasing the brake

- Pull the braking lever and push the small securing lever on the underside of the braking lever until it is disengaged
- Release the braking lever. Now, the brake is released.

2.7 Parking brakes

If your wheelchair is not equipped with a drum brake, deceleration is effected manually by applying force on the hand rims of the rear wheels. The parking brakes are used only for keeping the wheelchair in place when standing and to prevent it from rolling away. The correct function of the parking brakes is ensured only if sufficient air is in the tire. (see Chapter 5.2 - Maintenance)

Never apply the parking brakes when the wheelchair is in motion - Danger of tipping!

For adjusting the parking brakes please see chapter 4.

Standard brake

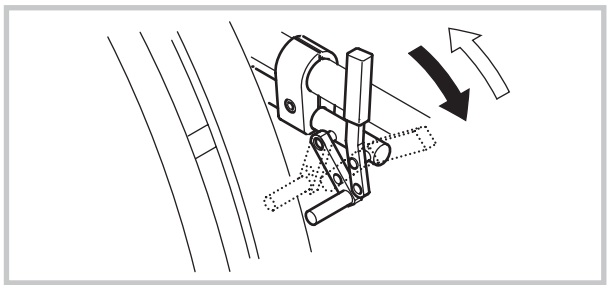

Figure 10

Applying the brake

- Push the brake lever forward until it reaches the stopper.

Releasing the brake

- Pull the braking lever back.

Performance brake

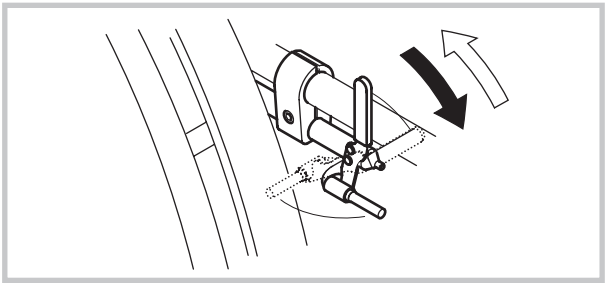

Figure 11

Applying the brake

- Push the brake lever forward until it reaches the stopper.

Releasing the brake

- Pull the braking lever back.

Active brake

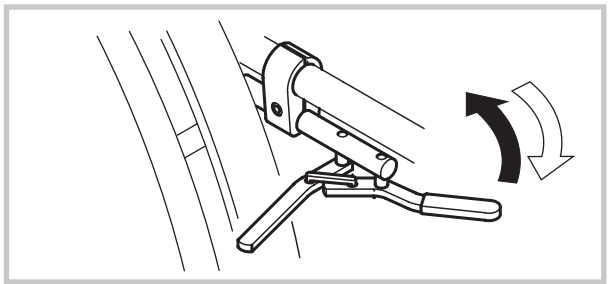

Figure 12

Applying the brake

- Pull the braking lever forward (beside or between your legs) until it reaches the stopper.

Releasing the brake

- Push the braking lever back (beside or between your legs).

Stoplock brake

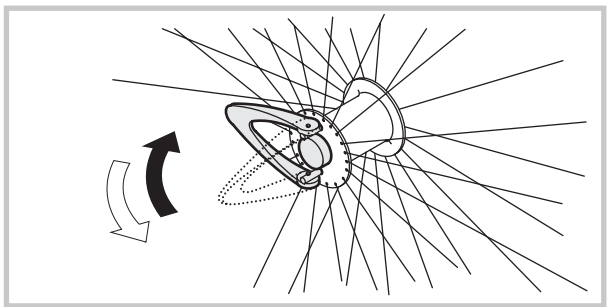

Figure 13

Applying the brake

- Fold the red lever at the hub forward.

Releasing the brake

- Fold the red lever at the hub back.

3 Transporting the wheelchair

Your wheelchair is not suitable for use in vehicles. Do not sit on the wheelchair during a transport, use a properly secured seat.

3.1 Folding and unfolding the wheelchair

Folding the wheelchair

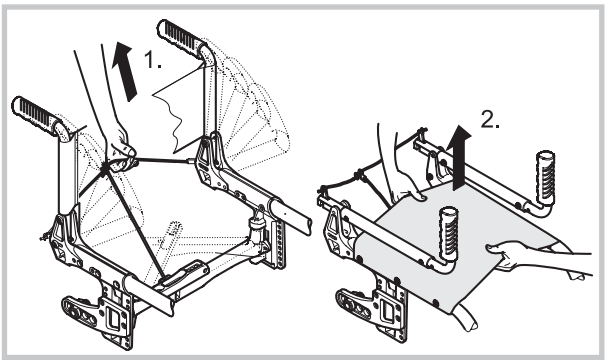

Figure 14

- Remove the seat cushion
- Pull the pull-strap on the back of the wheelchair up and back (1.). The shears of the folding mechanism under the seat folds up, the backrest folds forward.
- With both hands, pull the seat cover and the backrest cover upwards (2.). The wheelchair folds up completely.

Unfolding the wheelchair

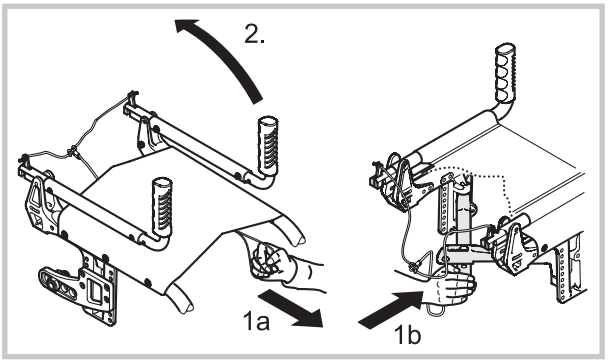

Figure 15

- Pull the cord on the front under the seat cover until the ratchet engages completely (1a.)

or

- push forward the shears until the ratchet engages completely by pressing the palm or the back of your hand against the projecting part of the shears (1b.)
- Pull up the backrest at the push-handles until the ratchet bolts engage in the lateral supports (2.)

3.2 Removing and installing the rear wheels

To reduce the size of your wheelchair, you can remove the rear wheels.

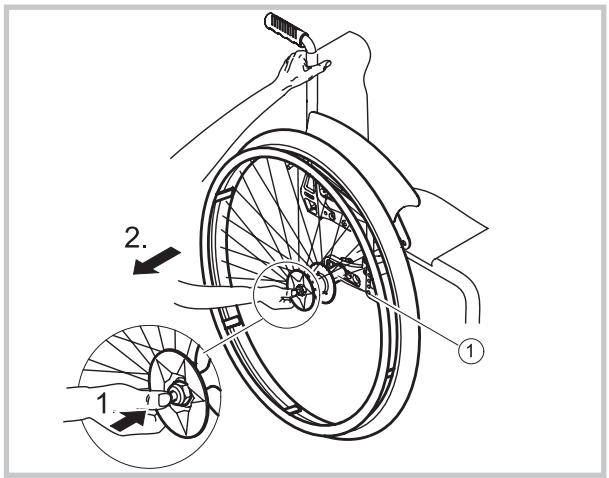

Figure 1

Removing the rear wheels

- Release the brakes.
- With one hand, hold the wheelchair in an upright position.
- With the other hand, hold the wheel at the spokes around the wheel hub (see Figure 1).
- Press the axle knob ① with your thumb and pull the wheel out of the adapter sleeve ②.

Installing the rear wheels

- Release the brakes.
- With one hand, hold the wheelchair in an upright position.
- With the other hand, hold the wheel at the spokes around the wheel hub (see Figure 1).
- Press the axle knob ① with your thumb, keep it pressed.
- Now insert the axle in the adapter sleeve ① of the axle tube until it comes to a rest.
- Release the axle knob. Now, the wheel fits tightly.

After installing a wheel, always make sure that the removable axles are engaged completely. The head must be extended completely. Check by pulling the wheels outwards.

4 Adjustments and options

Ensure that when making any adjustments between the rear wheel and the clothing guard that there is sufficient room to avoid contusions/finger traps.

4.1 Adjusting the parking brakes

The parking brakes must be readjusted after adjusting the position of the rear wheels.

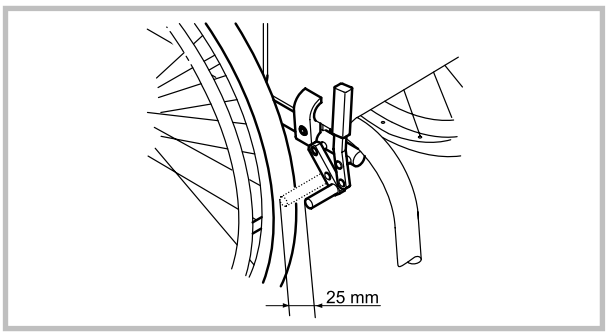

Figure 16

- Make sure that sufficient air is in the tyres. (see Chapter 5.2 - Maintenance).
- Loosen the hexagon socket bolt at the brake holder (hex. socket wrench 5mm), and move the brake to the required position.

With the brake applied, the brake shoe should not sink into the tyre more than 4 mm.

- Tighten the hexagon socket bolt at the brake holder again.

The function of the parking brakes is only ensured if sufficient air is in the tyre. (see Chapter 5.2 - *Maintenance*)

4.2 Adjusting the tension of the backrest cover

If your wheelchair is equipped with a backrest cover with adjustable tension, you can adjust the tension of the backrest cover to your individual requirements.

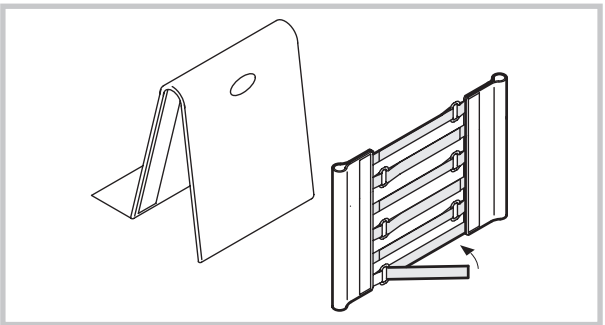

Figure 17

- Remove the backrest cushion.
- Loosen the Velcro® straps on the rear side of the seat cover by simply pulling them off.
- Tighten or loosen the straps, as required, and fix them again.

Do not tighten the topmost strap too much, otherwise folding the wheelchair becomes difficult.

Adjusting the backrest, see Chapter 6

4.3 Height adjustable push handles

The stepless height adjustable push handles allow pushing the wheelchair in a comfortable position. To ensure a maximum shoulder room for the wheelchair driver, the push handles are inclined backward.

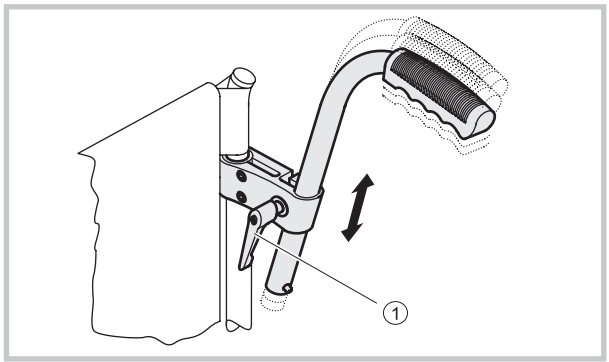

Figure 18

Adjusting the height of the push-handles:

- Loosen the locking bolt ①
- Move the handle to the required position
- Tighten the locking bolt again.

4.4 Armrest

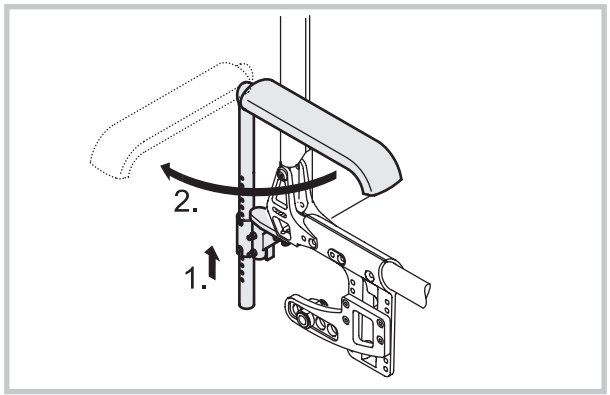

Figure 19

You can swing the armrest away or remove it completely:

- Lift up the armrest slightly (on rear side) and swing it aside or pull it out completely.

4.5 Fixing strap

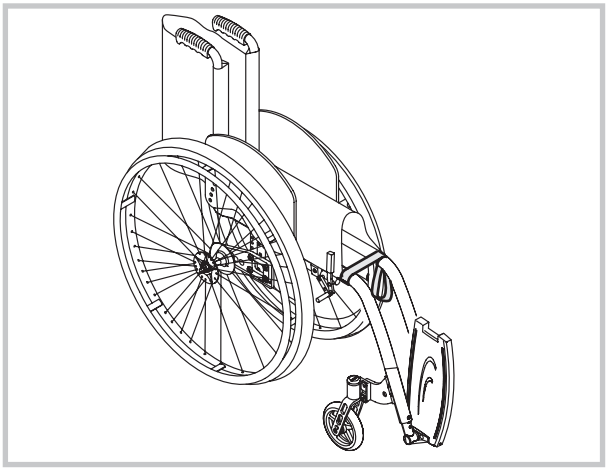

Figure 20

The fixing strap is used for fixing the wheelchair when folded. This way the wheelchair is unable to unfold unintentionally during transportation, for example.

- Wrap the fixing strap around the frame and fix it using the Velcro lock.

You can use the loop of the fixing strap for carrying the wheelchair.

Before unfolding the wheelchair, loosen the fixing strap again and fix it at the seat.

4.6 Transit wheels

If your wheelchair is too wide for certain applications (e.g. when travelling by train or airplane, or when driving in narrow aisles or through narrow doors), you can use the transit wheels.

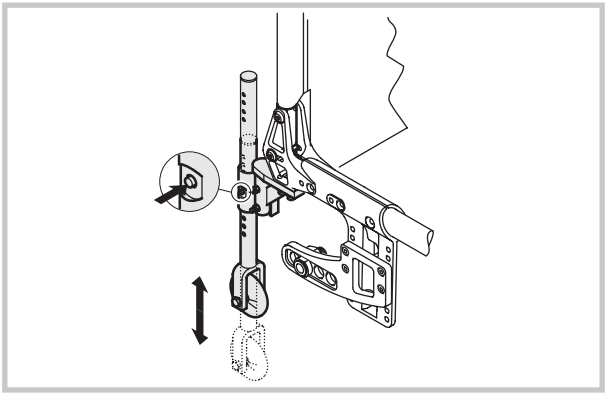

Figure 21

Change-over to transit wheels

- Move the transit wheels to their working position, by pushing the pin inward until you can pull down the tube. Push in the second pin, too, and pull the tube further down until the pin engages in the recess.

Check if the transit wheels are adjusted to the correct height. The distance to the floor must not exceed 2 cm.

- Move the wheelchair to an object which gives you a firm hold

- Hold on to the object with one hand and incline the wheelchair until the rear wheel on the opposite side leaves the floor
- Push your thumb on the head of the removable axle and pull the rear wheel out of the adapter sleeve.
- Lower the wheelchair again. Now it rests on the transit wheels on one side.
- Repeat the procedure for the other side.

Warning: Now, the parking brakes are no longer effective!

Change-over from transit wheels to rear wheels

- Move the wheelchair to an object which gives you a firm hold
- Hold on to the object with one hand and incline the wheelchair until the transit wheel on the opposite side leaves the floor
- Reinstall the rear wheel with the removable axle (also refer to Chapter 3.2 - Installing the rear wheels)

After installing the wheels, always make sure that the removable axles are engaged completely.

4.7 Antitipper

The Antitipper device prevents the wheel chair from tipping backward.

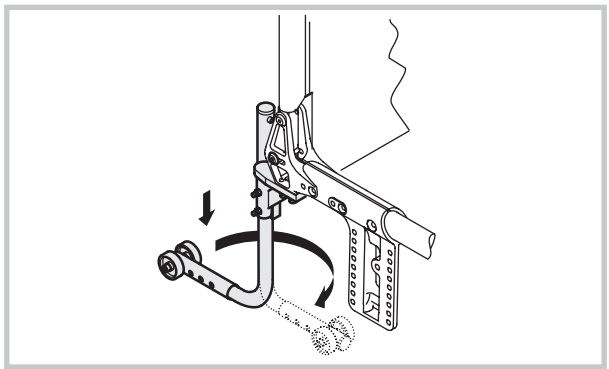

Figure 22

Activating the Antitipper

- With your foot, press the Antitipper shackle downward and outside at the same time until it engages.

In any case deactivate the Antitipper device before driving over a curbstone or a step. Danger of tipping!

Deactivating the Antitipper

- Slightly press the Antitipper shackle down and inside. The device will swing away upward.

4.8 Tipper aid

The tipper aid facilitates tipping the wheelchair for the guide when crossing a step, for example.

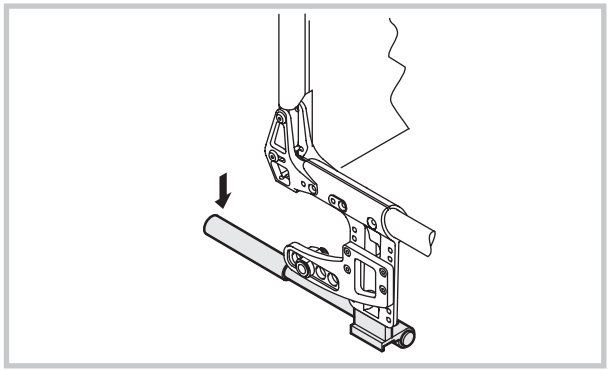

Figure 23

- Hold the wheelchair by the push-handles
- With one foot, step on the tipper aid and hold the wheelchair tipped until you have passed the obstacle.

The tipper aid must not project backward over the outer diameter of the rear wheel. Danger of tipping!

4.9 Cane holder

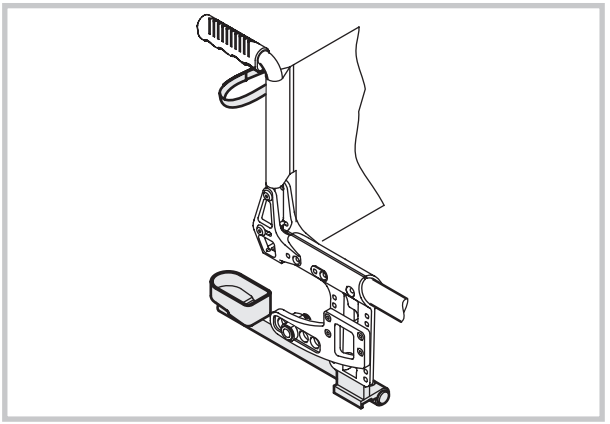

Figure 24

- Put the cane in the holder
- Secure the cane at the push handle using the Velcro strap.

The cane must not project backward over the outer diameter of the rear wheel. Danger of tipping!

4.10 Security belt

Your wheelchair can be equipped with a security belt which prevents falling out of the wheelchair.

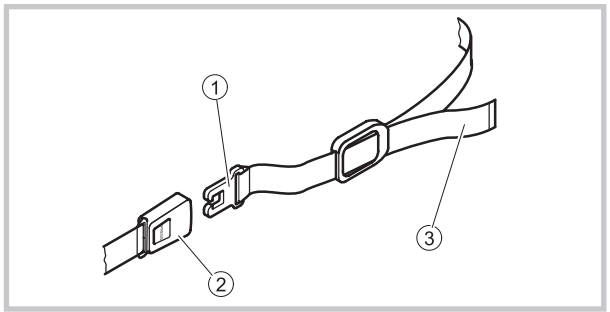

Figure 25

Belt assembly

The assembly of the belt should be carried out by your dealer!

- Pull the belt through the backrest and position it so that the buckle is placed at the front.

Opening the belt

- Press on the PRESS button and pull the locker ① out of its socket ②. The buckle will open up.

Closing the belt

- Insert the locker ① completely into the buckle socket ②.
- Pull the belt ③ until you are secured in the wheelchair.

4.11 Passive lighting

You can install two reflectors on the rear wheels.

4.12 Air pump

The air pump is delivered with a valve adapter. Depending on the size of the valve of your model, it may be necessary to turn the adapter at the air outlet of the pump.

- Remove the locknut
- Take out the valve adapter
- Turn it around and reinstall it
- Tighten the locknut again.

5 Service

5.1 Cleaning

The service life of your wheelchair increases if you maintain and clean it regularly.

Clean cushions and metal parts with a moist, soft cloth.

- Carefully dry your wheelchair after using it in rainy weather.

Sand and sea water may damage the ball bearings.

After using your wheelchair in a dirty environment, clean and dry it thoroughly as soon as possible.

Do not use rough scouring agents, aggressive cleaning agents or high-pressure cleaning machines.

5.2 Maintenance

We strongly advise that you should have your wheelchair thoroughly checked by the authorized dealer once a year, as a minimum. This is in addition to to the general maintenance procedures detailed below.

In order to make sure that your wheelchair will give you the necessary safety and reliability over its whole service life, you should carry out the following work regularly, or have it carried out by your authorized dealer.

Maintenance plan

Weekly	▪ Check air pressure in tyres ▪ Check the proper fitting of the rear wheel axle in the sleeve
Monthly	▪ Check bolted connections ▪ Oil removable axles ▪ Check tension of spokes
Yearly	▪ General check by an authorized dealer

Measuring the air pressure

To ensure that the driving and braking function is maintained, it is important that the air pressure in the tires is correct.

- Check weekly, if there is sufficient air in the tires.

The optimum pressure values are indicated in the following table:

Type of tire	***Air pressure***		
Smooth-running tires	*7 bars*	*700 kPa*	*100 psi*
Treaded tires	*7.5 bars*	*750 kPa*	*110 psi*
Indoor sports tire (Collé)	*10 bars*	*1000 kPa*	*140 psi*
Mountain bike tire	*5 bars*	*500 kPa*	*70 psi*

If you are not sure about the tires of your wheelchair, contact your authorized dealer.

Oiling the removable axles

To ensure the proper function of the removable axles, they must be oiled at regular intervals.

- Pour some resin-free bicycle oil on a cloth and slightly oil the balls at the end of the removable axles, the axle and the push-button.

Checking the bolted connections

Bolted connections may loosen if the wheelchair is used frequently.

- Check the bolts monthly for tight fit, re-tighten, if necessary.

Locknuts and locking bolts should be replaced if they become loose.

For replacement please contact an authorized dealer.

Repairing or replacing tires

- Take off the wheel (see Chapter 3.2).
- Deflate the tire by pressing on the valve.
- Lift one flank of the tire off the wheel rim.

Use a bicycle tire lever for this. Do not use sharp or pointed objects such as screw drivers in order to prevent the inner tube from being damaged.

- Pull the tube out of the tire.
- Repair the tube using a bicycle tire repair kit. If repairing is not possible, replace the tube.

Fitting tires

- Inflate the tube slightly until it has its round shape.
- Insert the valve in the valve hole of the wheel rim and insert the tube in the tire (the tube should be inside the tire completely without folds).
- Starting at the valve push the tire flanks over the edge of the wheel rim with both hands. Make sure that the tube is not jammed between the tire and the wheel rim.

Use a bicycle tire lever for this. Do not use sharp or pointed objects such as screw drivers in order to prevent the inner tube from being damaged.

- Pump the tire up to the maximum operating pressure. Make sure that the tire does not loose air anymore.

Spiderwheels

If the Spiderwheel starts squeeking then proceed as follows:

- Remove the wheel.
- Tighten the bolt in the wheelrim.

Spare parts

All spare parts are available at your authorized dealer.

To determine the size of a front wheel compare its outer diameter to the scale on the back of this manual.

5.3 Service life and disposal

We assume that our wheelchairs will be in use daily. For this reason the whole equipment is subjected to an almost continuous stress and, consequently, a natural wear and tear. Taking this into consideration and provided that the wheelchair is maintained properly, the lifetime of the Küschall® wheelchairs is approximately 5 years. If the wheelchair is used less frequently, e.g. if you use it inside your apartment only, and if it is maintained perfectly, the service life will increase accordingly.

For proper disposal of your wheelchair, please contact your authorized dealer.

5.4 Detecting and repairing defects

The daily use of the wheelchair, new adjustments or changed requirements may result in defects which can be repaired.

We recommend that the adjustments should be carried out by your authorized dealer.

Defect	***Possible cause***	***Remedy***
Wheelchair does not roll straight	*Wrong air pressure in one of the rear wheels*	*Correct air pressure (Chapter 5.2)*
	Bearing block of the front wheel fork is not in a vertical position	*Put bearing block in vertical position (Chapter 6.4)*
	The rear wheels do not run parallel or are axially shifted	*Correct the shear pretension or the track (Chapter 6.1)*
	Front wheels not adjusted to same height	*Position the front wheels such that they touch the floor at the same time (Chapter 6.4)*
	One or more spokes are broken	*replace defective spoke(s)*
	Spokes are not equally tightened	*Tighten the loose-fitting spokes*
	Front wheel bearings dirty or damaged	*Clean or replace bearing*
Wheelchair tips too easily	*Rear wheel mounted too far to the front*	*Shift wheels backward (Chapter 6.3)*
	Seat angle too large	*Mount adapter place at a lower position of the lateral support (Chapter 6.3)*
		Select smaller front fork
	Backrest angle too large	*Reduce backrest angle (Chapter 6.5)*
Poor or asymmetric brake grip	*Wrong air pressure in one or both rear wheels*	*Correct air pressure (Chapter 5.2)*
Rolling resistance is very high	*Rear wheels are off track*	*Change track (Chapter 6.1)*
	Wrong air pressure in the rear wheels	*Correct air pressure (Chapter 5.2)*
Front wheels vibrate when driving fast	*Tension at front wheel bearing block too low*	*Tighten nut at bearing block axle slightly*
Unfolding the wheelchair is difficult	*Folding mechanism adjusted too hard*	*Adjust folding mechanism (Chapter 6.1)*
	Back cover tightened too much	*Slightly loosen topmost strap*

5.5 Technical data

			Frame 75°		Frame 90°	
			short	**long**	**short**	**long**
GB	*Total width* [1]	*[cm]*	*54–64*			
GL	*Total length* [2]	*[cm]*	*85–93.5*			
SB	*Seat width*	*[cm]*	*34–44*			
SHv	*Height of seat front*	*[cm]*	*41.5–51.5*	*45–55*	*42.5–51.5*	*45–55*
SHh	*Height of seat rear*	*[cm]*	*37–47*	*36–50*	*36–47*	*36–49*
SW	*Seat angle*	*[cm]*	*2–10 (6)*			
ST	*Seat depth*	*[cm]*	***40** / 45*			
UL	*Length of lower leg*	*[cm]*	*33–40*	*40–50*	*32–40*	*40–50*
RH	*Backrest height*	*[cm]*	*31.5–48 (37.5)*			
RLW	*Backrest angle*		*74°–92° (87.5°)*			
	Weight [3]	*[kg]*	***11.6***			
	Maximum load	*[kg]*	*120*			

Bold figures: standard value
[1] GB = SB + 20 cm
[2] depends on seat angle, length of lower leg, rear wheel and position of footrest
[3] With standard configuration, can vary +/–

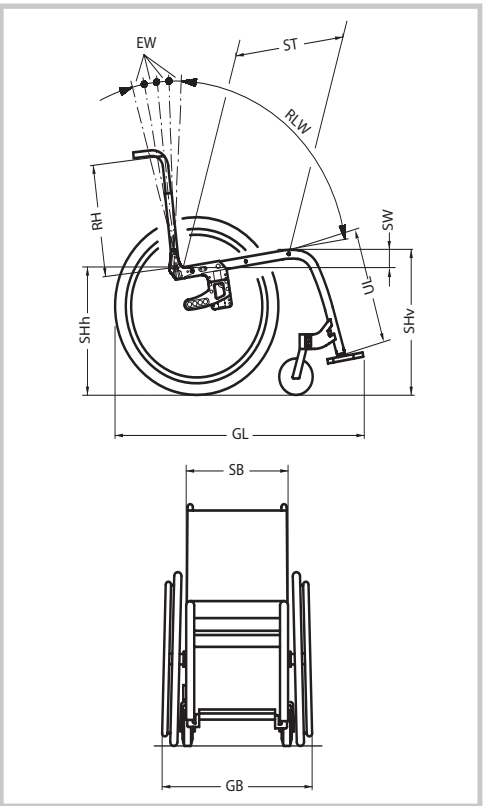

Figure 26

5.6 Warranty conditions

Standard terms

This is to certify that your küschall® wheelchair is warranted by Küschall®, for an unlimited period of time for the frame and 24 month for all other parts.

This warranty is subject to the following conditions:

1. Only küschall® wheelchairs purchased at full price are warranted against defective workmanship and materials.
2. If a defect or fault is discovered the Küschall® dealer from whom the appliance was purchased should be notified immediately.
3. The manufacturer will not accept responsibility for damage caused by misuse or the non-observance of the instructions set out in the user manual.
4. During the period of warranty, any parts that have become defective due to faulty workmanship or materials, will be renewed or repaired free of charge by the Küschall® dealer.
5. The warranty will be forfeited should any unauthorised alteration be made to the equipment.
6. The purchaser's statutory rights under the consumer Protection Act are not affected.
7. If the purchaser mounts additional adaptions to their Küschall®-wheelchair, they must obtain a written authorization from Küschall AG. Otherwise any possible liability claims cannot be asserted.

Limitation of liability

This warranty does not extend to the consequential costs resulting from fault clearance, in particular freight and travel costs, loss of earnings, expenses, etc.

Küschall® shall not be liable for:

- natural wear and tear
- inappropriate and incorrect use
- defective assembly or setting up the purchaser or third parties
- defective or neglectful treatment
- use of unsuitable spares.

6 Adjustments carried out by the authorized dealer

This chapter is expressly intended for trained authorized dealers.

Authorized dealers should inspect the wheelchair thoroughly for wear or damage and replace components as necessary

Minor changes may have great effects on the seat position and the driving behaviour and thus the safety. Since many adjustments influence each other, sufficient product know-how and technical experience is required in order to carry out these adjustments properly.

We recommend that you have all adjustments and repair work described in this section carried out by an authorized Küschall® dealer.

For your local authorized dealer, please contact the küschall® representation in your country (see back of this user manual).

6.1 Adjusting the footrest

Adjusting the height

The height of the footrest can be adjusted in steps of 12mm.

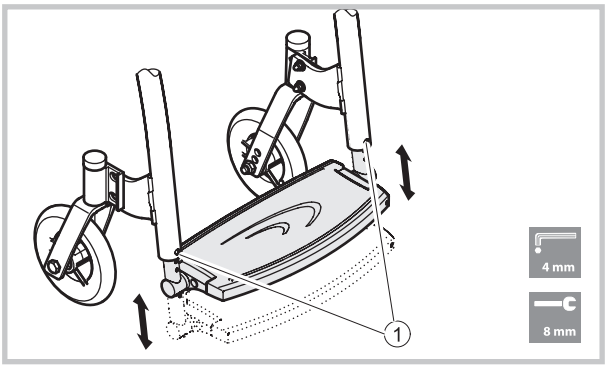

Figure 27

- Loosen the bolt ① above the footrest in the frame tube
- Extend the foot part telescope to the required length and insert the bolts in the holes which are closest
- Tighten the locking bolt again firmly.

Adjusting the angle

The angle between the footrest and the frame tube can be adjusted continuously.

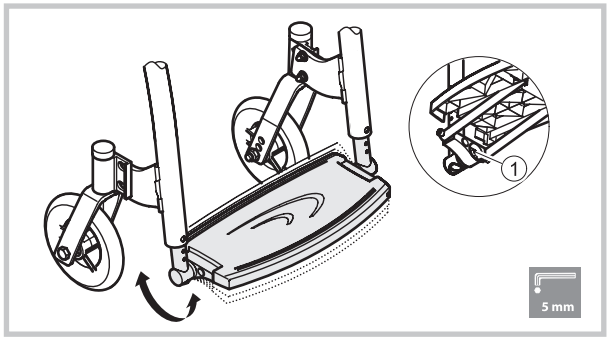

Figure 28

- Slightly loosen the bolted connection ① below the foot plate which fixes the telescopic tube in the foot plate fixture.
- Adjust the angle as required
- Tighten the bolts again.

Adjusting the position

The footrest can be mounted in 2 positions. To change the position of the footrest, proceed as follows:

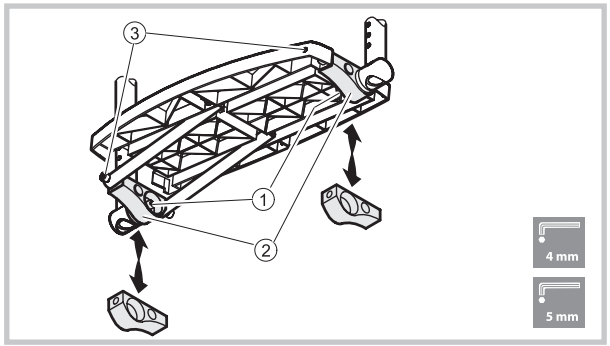

Figure 29

- Disassemble the telescopic tubes from the footplate using the bolts ①
- Loosen the bolts ② to remove the footplate supports ③
- Turn the footplate supports as shown in the drawing above and mount them again.

6.2 Positioning the rear wheel

The rear wheel can be mounted to the adapter plate in 4 different positions (horizontal). The adapter plate can be mounted to the lateral support in 5 different positions (vertical).

These adjustments have an influence on the floor-seat distance and the seat angle and therefore the stability of the wheelchair.

Vertical adjustment

If the adapter plate is mounted in a higher position at the lateral support, the floor-seat distance decreases and the seat angle increases (lower stability) if the front wheel adjustment is not changed

If the adapter plate is mounted in a lower position at the lateral support, the floor-seat distance increases and the seat angle decreases (higher stability)

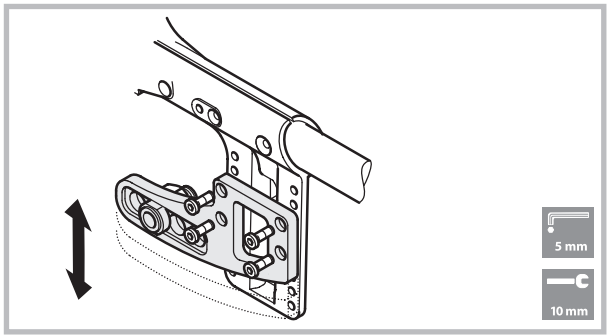

Figure 30

- Loosen the 4 bolts of the adapter plate
- Adjust the adapter plate to the required height
- Tighten the bolts again firmly.

Make sure to make the same adjustment on both sides of the wheelchair.

Horizontal adjustment

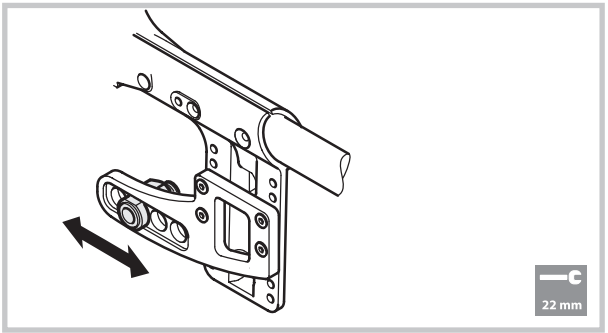

Figure 31

The further back you mount the adapter sleeve in the adapter plate, the higher the tipping safety of the wheelchair is.

- Loosen the adapter sleeve in the adapter plate
- Insert the adapter sleeve in the required hole of the adapter plate
- Tighten the adapter sleeve again firmly (Torque: 70Nm)

Make sure to make the same adjustment on both sides of the wheelchair

6.3 Aligning the front wheel

After adjustments which influence the seat height or the seat angle, the axis of the bearing block must be aligned vertically to the floor again.

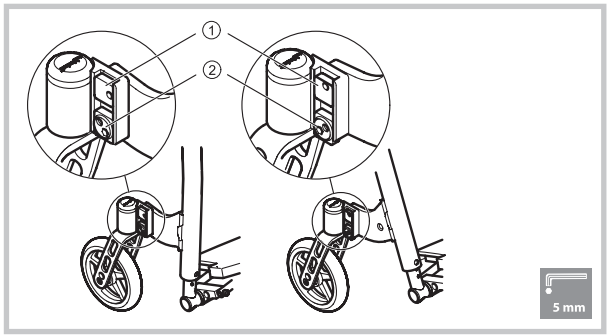

Figure 32

- Loosen the bolts at the bearing block
- Insert the upper excenter into the required position (further at front or rear side, depending on the seat angle)
- Turn the lower excenter (with bolt inserted) until the axis of the bearing block is aligned vertically to the floor
- Tighten both bolts again.

6.4 Adjusting the backrest

Adjusting the height

The height of the standard backrest with push-handle can be adjusted in steps of 15 mm.

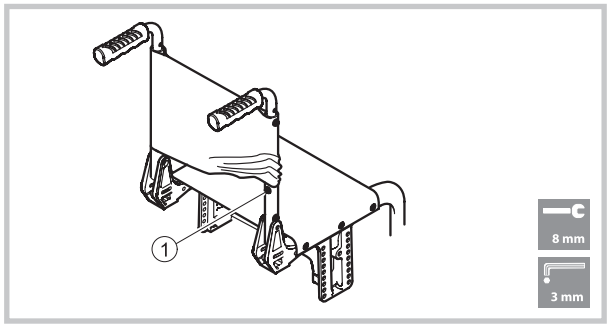

Figure 33

- Push up the backrest cushion until the bolt ① is visible
- Loosen the bolt and move the backrest to the required height
- Insert the bolt in the hole which is closest and tighten it again.

Adjusting the backrest angle

The further the backrest is inclined backward, the lower the tipping stability of the wheel chair.

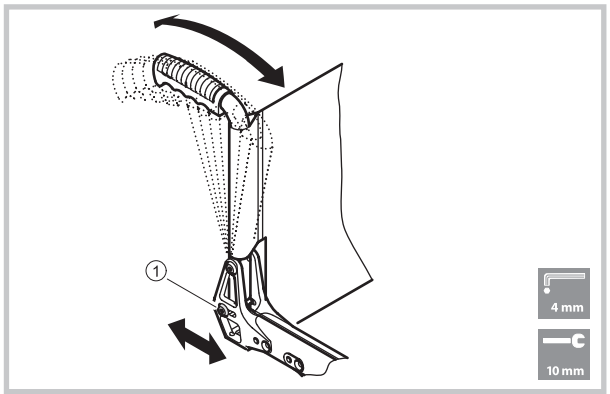

Figure 34

- Allow the backrest to engage in the lateral support
- Remove the lower bolt ① of the ratchet bolt fixture at the lateral support
- Move the backrest to the required position
- Insert the bolt in the hole which is closest and tighten it again
- Repeat the procedure on the other side of the wheel chair.

Make sure to make the same adjustment on both sides of the wheel chair.

6.5 Adjusting the height of the armrest

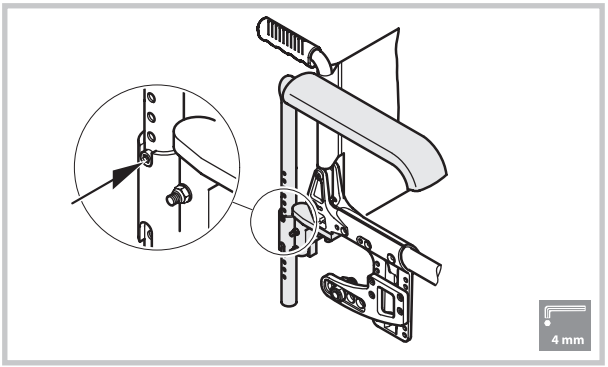

Figure 35

- Take off the armrest
- Loosen and take out the bolts at the arm rest tube
- Move the threaded sleeve in the inside of the tube to the required hole
- Insert the tube again and tighten it.
- Insert the armrest again by letting it engage in the supporting sleeve.

6.6 Moving the clothing guard to another position

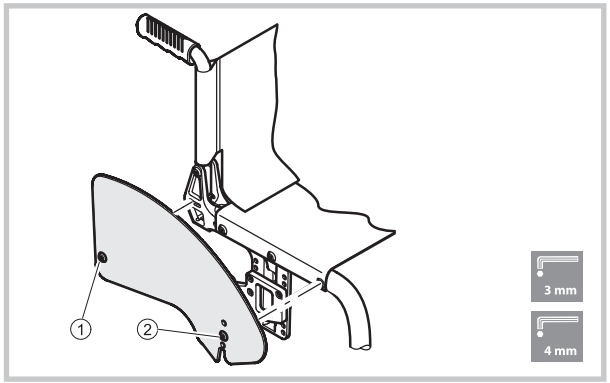

Figure 36

The clothing guard is bolted to the lateral support at the front and to the wheel support at the back. You can move it to another position or remove it.

- Loosen the bolt ①and loosen the bolt ② slightly until you can move the clothing guard
- Turn the clothing guard until it covers the tire completely
- Fix the clothing guard in the hole which is closest using the bolt ① and tighten the bolt ②again.

6.7 Moving the tire cover to another position

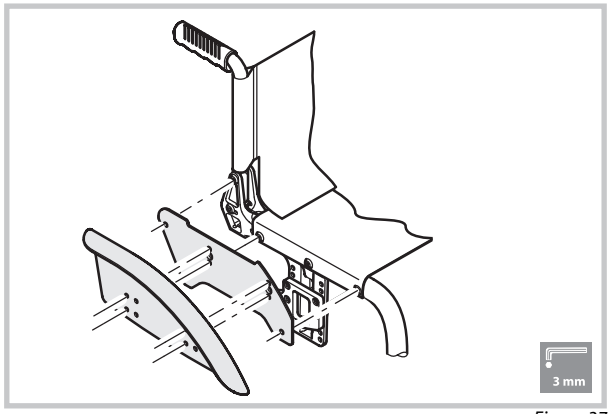

Figure 37

The tire cover is bolted to a support plate. You can move it to another position or replace it:

- Loosen both bolts
- Take off the clothing guard and mount it to the holes which are closest, so that the clothing guard covers the tire completely.

küschall®

Your authorized dealer:

Küschall AG
Benkenstrasse 260
CH-4108 Witterswil

küschall® distributors

Belgium & Luxemburg: Invacare · Autobaan 14 · B-8210 Loppem
Danmark: Invacare A/S · Sdr. Ringvej 39 · DK-2605 Brøndby
Deutschland & Ost Europa: Invacare Deutschland GmbH · Kleiststraße 49 • D-32457 Porta Westfalica
Eire: Invacare Ltd. · **Unit 5, Seatown Business Campus · Seatown Road · Swords, Co. · Dublin**
España: Invacare S.A. · c/ Areny · s/n Polígon Industrial de Celrà · E-17460 Celrà (Girona)
France: Invacare Poirier SAS · Route de St Roch · F-37230 Fondettes
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